§ 86.1008-2004

- (f) If an engine or vehicle cannot complete the service or mileage accumulation or emission test because of a malfunction, the manufacturer may request that the Administrator authorize the repair of that engine or vehicle or its deletion from the test sequence.
- (g) Whenever the manufacturer conducts testing pursuant to a test order issued under this subpart, the manufacturer shall notify the Administrator within one working day of receipt of the test order, which test facility will be used to comply with the test order and the number of available test cells at that facility. If no test cells are available at the desired facility, the manufacturer must provide alternate testing capability satisfactory to the Administrator.
- (1) Heavy-duty engine manufacturers with projected sales for the United States market for that year of 30,000 or greater shall complete emission testing at their facility on a minimum of two engines per 24-hour period, including each voided test and each diesel engine smoke test.
- (2) Heavy-duty engine manufacturers with projected sales for the United States market for that year of less than 30,000 shall complete emission testing at their facility on a minimum of one engine per 24-hour period, including each voided test and each diesel engine smoke test.
- (3) Light-duty truck and heavy-duty vehicle manufacturers shall perform a combination of tests pursuant to paragraph (a) of this section so that a minimum of four tests are performed per 24 hour period, including voided tests, for each available test cell.
- (4) The Administrator may approve a longer period based upon a request by a manufacturer accompanied by satisfactory justification.
- (h) The manufacturer shall perform test engine or vehicle selection, shipping, preparation, service or mileage accumulation, and testing in such a manner as to assure that the audit is performed in an expeditious manner.
- (i) The manufacturer may retest any test vehicle or engine after a fail decision has been reached in accordance with §86.1010-2001(d) based on the first test on each vehicle or engine; except that the Administrator may approve

retests at other times during the audit based upon a request by the manufacturer accompanied by a satisfactory justification. The manufacturer may test each vehicle or engine a total of three times. The manufacturer shall test each vehicle or engine the same number of times. The manufacturer may accumulate additional service or mileage before conducting retests, subject to the provisions of paragraph (c) of this section.

[59 FR 16305, Apr. 6, 1994, as amended at 62 FR 31239, June 6, 1997; 62 FR 47123, Sept. 5, 1997]

§86.1008-2004 Test procedures.

Section 86.1008-2004 includes text that specifies requirements that differ from §86.1008-2001. Where a paragraph in §86.1008-2001 is identical and applicable to §86.1008-2004, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see §86.1008-2001."

(a)(1)(i) For heavy-duty engines, the prescribed test procedure is the Federal Test Procedure as described in subparts N, I, and P of this part, except that 2004 and later model year engines shall not be subject to the test procedures specified in §86.1380, and 2007 and later model year engines shall not be subject to the test procedures specified in $\S\S86.1360(b)(2)$, $\S86.1360(f)$, $\S86.1370$, and 86.1372. The Administrator may, on the basis of a written application by a manufacturer, approve optional test procedures other than those in subparts N, I, and P of this part for any heavy-duty vehicle which is not susceptible to satisfactory testing using the procedures in subparts N, I, and P of this part.

(a)(1)(ii) through (i) [Reserved]. For guidance see §86.1008–2001.

[65 FR 59957, Oct. 6, 2000]

\$86.1009-84 Calculation and reporting of test results.

(a) Initial test results are calculated following the Federal Test Procedure specified in §86.1008-94(a). Round the initial test results to the number of decimal places contained in the applicable emission standard, expressed to one additional significant figure.

Environmental Protection Agency

Rounding shall be done in accordance with ASTM E 29-90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see §86.1).

- (b) Final test results for each test vehicle shall be calculated by summing the initial test results derived in paragraph (a) of this section for each test engine or vehicle, dividing by the number of tests conducted on the engine or vehicle, and rounding to the same number of decimal places contained in the applicable emission standard, pressed to one additional significant figure. Rounding shall be done in accordance with ASTM E 29-90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see §86.1).
- (c) Final deteriorated test results. (1) The final deteriorated test results for each heavy-duty engine or light-duty truck tested according to subpart B, C, D, N, or P of this part are calculated by either adding or multiplying, as specified in subpart A of this part for the applicable engine family control system combination, the appropriate deterioration factor to the final test results for each vehicle or engine.
- (2) The final deteriorated test results for each heavy-duty engine tested according to subpart I of this part are calculated by adding the appropriate deterioration factor, derived from the certification process for the engine family-control system combination and model year for the selected configuration to which the test engine belongs, to the final test results. If the deterioration factor computed during the certification process is less than zero, that deterioration factor will be zero.
- (3) There are no deterioration factors for light-duty trucks tested in accordance with §86.146–96 of subpart B of this part or for heavy-duty vehicles tested in accordance with §86.1246–96 of subpart M of this part. Accordingly, for the Fuel Dispensing Spitback Test the term "final deteriorated test results" shall mean the final test results derived in paragraph (b) of this section for each test vehicle, rounded to the

same number of significant figures contained in the applicable standard in accordance with ASTM E 29-90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see §86.1).

- (4) The final deteriorated test results are rounded to the same number of significant figures contained in the applicable standard in accordance with ASTM E 29-90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see §86.1).
- (d) Within five working days after completion of testing of all engines or vehicles pursuant to a test order, the manufacturer shall submit to the Administrator a report which includes the following information:
- (1) The location and description of the manufacturer's exhaust emission test facilities which were utilized to conduct testing reported pursuant to this section;
- (2) The applicable standards or compliance levels against which the engines or vehicles were tested;
- (3) Deterioration factors for the engine family to which the selected configuration belongs;
- (4) A description of the engine or vehicle and any emission-related component selection method used;
- (5) For each test conducted,
- (i) Test engine or vehicle description, including:
- (A) Configuration and engine family identification,
 - (B) Year, make and build date,
- $\left(C\right)$ Engine or vehicle identification number, and
- (D) Number of hours of service accumulated on engine or number of miles on vehicle prior to testing;
- (ii) Location where service or mileage accumulation was conducted and description of accumulation procedure and schedule;
- (iii) Test number, date, initial test results before and after rounding, final test results and final deteriorated test results for all exhaust emission tests, whether valid or invalid, and the reason for invalidation, if applicable;

§ 86.1009-96

- (iv) A complete description of any modification, repair, preparation, maintenance, and/or testing which was performed on the test engine or vehicle and has not been reported pursuant to any other paragraph of this subpart and will not be performed on all other production engines or vehicles;
- (v) Where an engine or vehicle was deleted from the test sequence by authorization of the Administrator, the reason for the deletion;
- (vi) For all valid and invalid exhaust emission tests, carbon dioxide emission values for LDTs and brake-specific fuel consumption values for HDEs; and
- (vii) Any other information the Administrator may request relevant to the determination as to whether the new heavy-duty engines or light-duty trucks being manufactured by the manufacturer do in fact conform with the regulations with respect to which the certificate of conformity was issued; and
- (6) The following statement and endorsement:

This report is submitted pursuant to Sections 206 and 208 of the Clean Air Act. This Selective Enforcement Audit was conducted in complete conformance with all applicable regulations under 40 CFR part 86 et seq., and the conditions of the test order. No emission-related changes to production processes or quality control procedures for the vehicle or engine configuration tested have been made between receipt of the test order and conclusion of the audit. All data and information reported herein is, to the best of

(Company Name)

knowledge, true and accurate. I am aware of the penalties associated with violations of the Clean Air Act and the regulations thereunder.

(Authorized Company Representative)

[45 FR 63772, Sept. 25, 1980, as amended at 48 FR 52209, Nov. 16, 1983; 50 FR 35387, Aug. 30, 1985; 57 FR 31923, July 17, 1992; 58 FR 16046, Mar. 24, 1993]

§86.1009-96 Calculation and reporting of test results.

Section 86.1009-96 includes text that specifies requirements that differ from \$86.1009-84. Where a paragraph in \$86.1009-84 is identical and applicable to \$86.1009-96, this is indicated by specifying the corresponding paragraph

and the statement "[Reserved]. For guidance see §86.1009-84." Where a corresponding paragraph of §86.1009-84 is not applicable, this is indicated by the statement "[Reserved]."

(a) Initial test results are calculated following the test procedures specified in §86.1008(a). Round these results to the number of decimal places contained in the applicable emission standard expressed to one additional significant figure. Rounding is done in accordance with ASTM E 29–90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see §86.1).

(b) Final test results are calculated by summing the initial test results within a specific FTP, CST, or Cold Temperature CO Test Procedure derived in paragraph (a) of this section for each test engine or vehicle, dividing by the number of times that specific FTP, CST, or Cold Temperature CO Test Procedure has been conducted on the engine or vehicle, and rounding in accordance with ASTM E29-90 to the same number of decimal places contained in the applicable standard expressed to one additional significant figure. Rounding is done in accordance with ASTM E 29-90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see §86.1).

- (c) Final deteriorated test results. (1) The final deteriorated test results for each heavy-duty engine or light-duty truck tested according to subpart B, C, D, I, N, or P of this part are calculated by multiplying or adding the final test results by the appropriate deterioration factor, derived from the certification process for the engine familycontrol system combination and model year for the selected configuration to which the test engine or vehicle belongs. If the multiplicative deterioration factor as computed during the certification process is less than one, that deterioration factor is one. If the additive deterioration factor as computed during the certification process is less than zero, that deterioration factor will be zero.
- (2) [Reserved]